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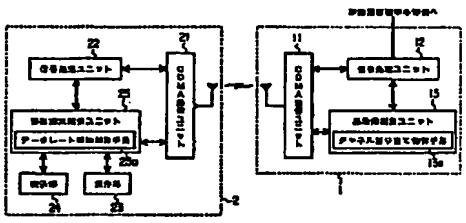
(54) **MOBILE COMMUNICATION SYSTEM, BASE STATION EQUIPMENT AND MOBILE TERMINAL EQUIPMENT USED FOR THE SAME**

(57) Abstract:

PROBLEM TO BE SOLVED: To efficiently provide a high-speed data transmission service within a which does not give range not disadvantages to ather users.

SOLUTION: For this mobile communication system, the upper limit of the number of channels to be allocated to one mobile terminal within a cell in charge is determined for each prescribed time zone and set to a base station control unit 13. In the time zone, the base station control unit 1 limits the number of channels which are be allocated to the mobile terminal equipment so as not to exceed the upper limit.





Translation of the pertinent portions of
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Claims:

1. A mobile communication system comprising a mobile communication network and mobile terminals, said mobile communication network including a plurality of base stations each distributed in a service area to form a cell, said mobile communication network allocating a plurality of channels to a mobile terminal so that they are used in a bundle for high-speed data transmission, characterized in that said system comprises means for limiting the number of channels allocated in such manner that an upper limit of the number of channels to be allocated to a mobile terminal within a cell is determined for each specific time zone, and the number of channels allocated to the mobile terminal is limited so as not to exceed the upper limit according to the time zone and the cell to which the mobile station belongs.

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4. A mobile communication system according to any one of Claims 1 to 3 in which a priority is set to each of the mobile terminals and said means for limiting the number of channels allocated modifies the upper limit of the number of channels according to the priority of the mobile terminal in question.

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Accordingly, it is possible to prevent the radio wave environment from rapidly changing due to any interference and to prevent the amount of control from suddenly increasing. As the result, higher quality can be maintained. The present invention is not limited to the embodiments as described above. For example, the degree of limitation for the number of channels allocated may be changed depending on the mobile terminal 2. In particular, each of the mobile terminals 2 may be given a priority associated with the content of subscription. The priority information is transmitted together with the request for connection that the mobile terminal 2 sends. Then, the base station control unit 13 operates based on the priority information so as not to limit the number of channels allocated depending on the specific mobile terminal 2, for example. Alternatively, in case where a plurality of channels is used, a main channel may be dedicated for voice communication and a sub-channel may be dedicated for data transmission. Then, it may be possible to transfer the necessary data while making a voice call.

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